ABSTRACT OF THE DISCLOSURE

An image forming apparatus forms an image on an image forming medium and can form a specific hidden pattern for specifying a body of an apparatus at a predetermined position of the medium. A hidden pattern addition mechanism uses both a software control signal which is generated by software and a hardware control signal which is generated by hardware and must be used for forming the image on the medium as control signals for adding the specific hidden pattern when the specific hidden pattern is added to a specific position of the medium to form the image. The concrete hidden pattern addition mechanism comprises: a color image data supply portion; a confirmation portion for confirming the existence/absence of image data in the image forming apparatus; a hardware control signal supply portion for generating and supplying a hardware control signal based on the existence/absence of the confirmed image data; a software control signal supply portion for generating and supplying a software control signal for adding a specific hidden pattern; a control signal synthesization portion for synthesizing a control signal in such a manner the specific hidden pattern is necessarily formed on a color image when a usual image is formed on the image forming medium based on the hardware control signal and the software control signal; a hidden pattern generation portion for generating the specific hidden pattern; a test pattern generation portion for generating and outputting a test pattern when a color image is not formed; a pattern selection portion for selecting and outputting one of the specific hidden pattern and the test pattern based on the control signal synthesized by the control signal synthesization portion; and an image formation output signal synthesization portion which synthesizes the color image data supplied from the image data supply portion and the specific hidden pattern selected by the pattern selection portion when the image data is inputted and synthesizes the test pattern selected by the selection portion when the color image data is not inputted.